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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,724	02/12/2004	Richard Louis Arndt	AUS920031060US1	5919

35525 7590 04/10/2007  
IBM CORP (YA)  
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DALLAS, TX 75380

EXAMINER
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BLACK, LINH

ART UNIT	PAPER NUMBER
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2163

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/10/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/777,724		ARNDT ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	LINH BLACK		2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 January 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

This communication is in response to the documents dated 1/10/07. Claims 1-21 are pending in the application. Claims 1, 11, and 21 are independent claims.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-8, and 11-18 and 21 are rejected under 35 U.S.C. 101 because

Regarding claims 1, 11 and 21, these claims recite the mapping by the client partition the logical resource to the physical resource, but fails to recite a tangible result, a requirement for compliance with the provisions of 35 U.S.C. § 101 in view of the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, published on 26 October 2005, which can be found at [http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101\\_20051026.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf), particularly with respect to ANNEX IV Computer-Related Nonstatutory Subject Matter, beginning on page 50.

For a result to be tangible, it must be more than just a thought or a computation; it must have real-world value rather than an abstract result. For instance, note that the limitations of claims 9 and 19 are not rejected, since they recite the function of notifying

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the user of the failure of the server partition, whereas (for instance), claim 1 merely cites 'mapping the logical resource to physical resource' as the result.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-21 are ~~rejected~~ rejected under 35 U.S.C. 102(e) as being anticipated by Armstrong et al. (6467007).

As per claim 1, Armstrong et al. teach logical partitioning with various resources in the physical computer – col. 1, lines 43-67; apparatus or computer 10 represents any of a number of multi-user computer systems such as a network server – col. 4, lines 9-23; a primary partition shares some of the partition management functions for the computer, such as handling the powering on or powering off of the secondary partitions on computer 10 – col. 4, lines 55-67, thus, the primary partition acts a server partition, and the secondary partitions are equivalent to client partitions. Armstrong et al. teach the allocating/granting of resources – col. 5, lines 25-65; address translation tables/hardware page tables 90-94 are provided in the partition manager to respectively handle the virtual to real address translation/mapping operations.

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As per claims 2-4, Armstrong et al. teach with logical partitioning, a single computer is permitted to operate essentially like multiple and independent "virtual" computers (logical partitions)...each logical partition executes a separate operating system, and from the perspective of users and of the software executing on the logical partition, operates as a fully independent computer...a hypervisor/partition manager...facilitates the allocation of resources to different logical partitions...each logical partition is fully independent of the other logical partitions – col. 1, lines 43-67; generating an identifier for the logical resource – col. 8, lines 1-27; fig. 3, virtual page number. Since each logical partition operates as a fully independent computer, its each logical resource id shall be distinct within the partition for translating/mapping and identification purposes and which separates from the resource outside of the partition, thus, cannot be used to access the logical resource outside.

As per claim 5, Armstrong et al. teach resources may be allocated to any logical partition in the alternative; moreover, resources can be reallocated on a dynamic basis to service the needs of other logical partitions – col. 5, lines 55-65; thus, when resources need be relocated, a client/secondary partition has to return the control of resource back to the primary/server partition.

As per claims 6-8, Armstrong et al. teach rescinding, by the server partition, the logical resource; responsive to a determination, at the server partition, that the client partition is incapable of gracefully returning the

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logical resource, performing a forced rescind operation; preventing translation tables in the client partition from containing references to a physical address of the logical resource – col. 3, lines 13-56, especially lines 23-43 (requires that one or more entries in the address translation table be invalidated to ensure that a subsequent access to the virtual memory address space will attempt to access an unmapped virtual memory address).

As per claims 9-10, Amstrong et al. teach computer 10 need not be shut down if there is a hung processor in a partition; it is often desirable to initiate a reset operation to the hung partition supported by another processor. A reset request and a memory access interrupt are created...and sent to the problem partition...col. 3, lines 1-49; delay/waits at block 124 for the target processor to return to a known initial state by setting a timer and periodically checking the responsiveness of the target processor...col. 8, lines 35-59.

Claims 11-21 claim the same subject matter as of claims 1-10 are rejected based on the same ground of rejection.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LINH BLACK whose telephone number is 571-272-4106. The examiner can normally be reached on Mon.-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



LINH BLACK  
Examiner  
Art Unit 2163

March 30, 2007

Leslie Wong  
Primary Examiner